

IN THE SPECIFICATION:

Please amend the Specification as follows.

Please amend paragraphs [0048], [0049] and [0050] as follows:

[0048] Figure 8 illustrates a preferred data structure ~~70~~ for storing observations. The data structure ~~70~~80 comprises an observation history for one entity and one variable. Column ~~71~~81 is a running number of the cycle, such as a 24-hour period. Data arrays that comprise actual observations are scaled by dividing with the specific magnitude parameter ~~72~~82. Then the scaled data arrays are clustered with a trained clustering system. The observation history ~~70~~80 shows entries for 11 consecutive days. An entry for a day (or any other cycle used) comprises the best-matching cluster center ~~73~~83 and a flag ~~74~~84 that indicates whether the scaled data array is within predetermined confidence interval, ie, whether it deviates from the best-matching cluster center by less than some confidence measure.

[0049] For most days, cluster center 2 was the closest match. For days 7 and 8, cluster centers 3 and 1, respectively, were the best matches. For day 10, however, we assume that the actual observations followed the curve 71 in Figure 7. In other words, the actual observations were within the confidence interval ~~73~~83 of the best-matching prototype (cluster center) number 2 (shown as curve 72) except for a three consecutive observations beginning at 15:00. Accordingly, the entry for column ~~73~~83 and day 10

indicates that cluster center 2 was the best match but the flag in column 7484 shows that the scaled observations are not within the confidence interval for the entire cycle. There is an actual observations record 7585 for day 10. The actual observations record 7585 indicates that on day 10, beginning at 15:00, the actual observations for three consecutive hours were 123, 15 and 192.

[0050] If all the scaled observations of a cycle, such as a 24-hour period, are within the confidence interval, only three descriptors have to be archived, namely the magnitude (a float number), the best-matching cluster center (an integer) and the flag 7484.